Voodoo3 2000 & 3000 FAQs

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This page provides general Voodoo3 2000 & 3000 support information.

1. **What are the system requirements for the Voodoo3 2000 and 3000 adapter?**
2. **What models do the Voodoo3 come in and what is the difference between them?**
3. **Does my Voodoo3 require an IRQ in order to run?**
4. **Are you going to sell a 3D only Voodoo3 adapter?**
5. **Is it OK to overclock my Voodoo3 adapter?**
6. **What Operating Systems does the Voodoo3 adapter support?**
7. **The Voodoo 3 has DVD Hardware Assist. I currently have a DVD Hardware Decoder card. When I purchase a Voodoo3, will I be able to remove the original DVD Decoder card and play DVD movies directly through the Voodoo 3 Card?**
8. **How do I uninstall my old video card?**
9. **Is the Voodoo3 2000 and 3000 compatible with my motherboard?**
10. **I'm having a problem with a specific game. Where do I get patches?**
11. **How should I set my BIOS settings for optimal performance for the Voodoo3 adapter?**
12. **Is my Voodoo3 getting an IRQ?**
13. **Why can't I use Alt-Tab to switch in and out of games?**
14. **I'm getting a blank screen after the Windows logo. How do I correct this?**
15. **What TV Out resolutions can the Voodoo3-3000 handle and what signals does it support?**
16. **Why doesn't Voodoo3 support 32b rendering, or large textures, or 32b textures?**
17. **Does the Voodoo3 2000 and 3000 support the Linux operating system?**
18. **Do the Voodoo3 2000 and 3000 support the Mac environment?**
19. **My TV and monitor are garbled simultaneously when using the TV Output feature.**
20. **If I put a fan on my Voodoo3, will I void my warranty?**
21. **When I start a Direct3D game, I get an error message that says: "No hardware acceleration found," or something similar.**
22. **Error message: Error loading 3dfxcmn.dll**
23. **Error message: CoCreate Instance Failed.**
24. **What is the best way to install new drivers for my Voodoo3 card (or install it for the first time)?**
25. **I have an onboard video card and I'm having problems getting my**

Voodoo3 to take over as the primary video card.
26. **Motherboard Updates and other information.**

1. What are the system requirements for the Voodoo3 2000 and 3000 adapter?

The system requirements for a PCI version are: a PCI 2.1 compliant slot on the motherboard and a P90 or better CPU. For the AGP version, you will need a Pentium 2 class machine or better.

2. What models do the Voodoo3 come in and what is the difference between them?

The Voodoo3 adapter comes in three different models: the Voodoo3-2000, Voodoo3-3000, and the Voodoo3-3500TV. The 2000 model comes in both AGP and PCI formats and is clocked at 143 MHz. The 3000 model comes in both AGP and PCI formats and is clocked at 166 MHz. The AGP has the TV Out function on it, while the PCI version does not. The Voodoo3-3500TV comes specifically in AGP format, and is clocked at 183 MHz. It also has a built-in TV and FM Tuner on the adapter. (NOTE: The European PAL version of the 3500TV only comes with the TV Tuner on it.)

3. Does my Voodoo3 require an IRQ in order to run?

Yes. Generally today's display adapters require an IRQ in order to function. Generally, the IRQ is assigned in the range of 9 through 12.

4. Are you going to sell a 3D only Voodoo3 adapter?

No, all Voodoo3 cards will be 2D and 3D combined.

5. Is it OK to overclock my Voodoo3 adapter?

Like many industry leaders including Intel, 3dfx Interactive does not support or condone the act of overclocking. Overclocking is a term used to describe the practice of running computer components above the specification set by the manufacturer. 3dfx does extensive speed-bin testing on our chips to determine which clock speed each part will operate consistently and reliably. Overclocking your Voodoo3 chip can cause damage to the graphics accelerator board and/or the system the board is installed in. It can also greatly decrease the life expectancy of the overclocked chip.

6. What Operating Systems does the Voodoo3 adapter support?

The Voodoo3 adapters support Windows 95, Windows 98, and Windows NT 4.0.

7. The Voodoo 3 has DVD Hardware Assist. I currently have a DVD Hardware Decoder card. When I purchase a Voodoo3, will I be able to remove the original DVD Decoder card and play DVD movies directly through the Voodoo 3 Card?

Provided that you have a P2-233 or greater CPU then you can still use your original DVD decoder card provided it is CCIR601 compliant. The Voodoo3 card will just make the DVD decoding operate faster. By integrating planar-to-packed conversion in hardware, the Voodoo3 offers full 30 fps (frames per second) MPEG-2 Playback with no dropped frames and Soft DVD support for all major CODECs.

8. How do I uninstall my old video card?

To uninstall your previous display adapter, you will either need to contact your system manufacturer or the display manufacturer for this information.

9. Is the Voodoo3 2000 and 3000 compatible with my motherboard?

Here is a list of known motherboard hardware issues (voltage hardware issues will affect AGP models only):

The Abit LX6 pre-revision 1.1 has a known voltage issue.

The revision 1.05 Asus P2L97 has a known voltage issue. http://www.asus.com.tw/Products/Techref/Misc/rivatnt-rework.html

The pre-revision 1.10 Asus P2B is missing a necessary jumper to set the AGP slot to 66mhz.

The FIC PA-2013 (other than revision 2.1 PCB) has a voltage issue which will burn out the motherboard after an extended period of time using the Voodoo3.

FIC has a new VA-503+ FAQ which gives instruction on how to make an AGP Voodoo3 card work properly with this motherboard. http://www.fica.com/english/techsupp/faq/socket7/FAQ503+.htm

The FIC VB-601-V will fail to load Windows (protection error) with the current AMI Bios.

Multiple Gigabyte boards have known voltage issues, including the: GA-BXC , GA-BXE, and the GA-BX2000.

Here is a handy list (from the Gigabyte German website, no less) of Gigabyte boards that WILL work with the Voodoo3:

GA-BX2000 PCB ver.1.1 Jumper 20 und 21 muß gesetzt sein
GA-6BXC PCB ver.2.0
GA-6BXE PCB ver.2.0
GA-6BX7 PCB ver.1.4
GA-6BA PCB ver.3.0
GA-6ZXC PCB ver.2.0
GA-6VXE PCB ver.2.2
GA-6VA7 PCB ver.1.2

AGP voltage regulator notes: There is a problem with the combination of older motherboards and newer AGP graphic cards. This is due to the fact that some of the early AGP motherboards used a linear regulator to control the power supply to the AGP slot. Linear regulators can supply at most 2.5A of current, while the switching regulator used on newer motherboards can supply up to 6A at 3.3V. When these motherboards with linear regulators were produced, the average consumption of a graphics card was 1 to 2A, making a supply of 2.5A more than sufficient. Since then, graphic cards have developed and currently the average consumption is between 4 and 5A. This is no problem for motherboards using a switching regulator, but older boards with a linear regulator may run into issues such as overheating, burnouts, and lockups.

10. I'm having a problem with a specific game. Where do I get patches?

3dfx does not write game patches. Normally you would visit the game manufacturer's web site for updated patches for the games. Below is a list of sites that have some of the more popular game patches.

http://3dfiles.com
http://www.bluesnews.com/
http://www.agn3d.com/
http://www.gameaholic.com/
http://www.3dfxgamers.com/

11. How should I set my BIOS settings for optimal performance for the Voodoo3 adapter?

Video BIOS Cache: Disabled (can be enabled if system is stable) Video BIOS Shadow: Disabled (can be enabled if system is stable) Palette Snoop: Disabled AGP Turbo Mode: Disabled (can be enabled if system is stable) AGP Aperture Size: 64 (usually default setting) PnP Aware OS: Yes Resources Controlled by: Auto Assign IRQ to VGA: Yes Disable the L2 external cache on Super 7 boards (only necessary if experiencing severe game crashes, etc.) Enable CPU WRITE ALLOCATE or K6 WRITE (this setting is usually necessary for DirectX games to work correctly on Super 7 boards) K6 Users: If your BIOS doesn't have this setting, update the BIOS. If no BIOS update is available, use the "Powertweak" utility from: http://www.powertweak.com/ or the freeware Windows 9x/DOS utility to set K6 Write Allocation:

http://freespace.virgin.net/kevin.perry/PCMusic/Downloads/setk6v3.zip
ftp://ftp.heise.de/pub/ct/ctsi/setk6v3.zip
http://www.longinfo.com/setk6v2.zip (for Voodoo2 ONLY)

12. Is my Voodoo3 getting an IRQ?

Verify in the Windows "device manager" that the Voodoo3 has both an IRQ assigned to it, and the IRQ is not shared with any other devices except for the IRQ holder for PCI steering. (Hint: Double click on the "computer" icon which is always at the top of the device manager's list of devices. This will give you a complete report of all IRQ's and which devices are using them)

13. Why can't I use Alt-Tab to switch in and out of games?

You will need to make sure you are using the latest drivers for the Voodoo3-2000 adapter. The drivers are available at http://www.3dfxgamers.com /view.asp?PAGE=V3Drivers.

Games that are designed for Glide 2.X will not function with the Alt+Tab function since Glide 2.X does not support it.

14. I'm getting a blank screen after the Windows logo. How do I correct this?

Generally after installing the drivers for the Voodoo3 2000, a black screen will occur if the system is not handling the Bus Mastering properly. This happens on some of the Socket 7 AGP motherboards. Contact the motherboard manufacturer for all the latest drivers for the motherboard and install those drivers. There should not be any further issues once the drivers are installed.

15. What TV Out resolutions can the Voodoo3-3000 handle and what signals does it support?

The resolutions that the Voodoo3-3000 adapter can handle are 640x480 and 800x600. The TV Out comes in two different flavors as far as signals go. They are NTSC and PAL. NTSC is designed for North America and will not function in a PAL standard country. Conversely, the PAL is designed for those countries that are running the PAL signaled television and will not function in North America.

16. Why doesn't Voodoo3 support 32b rendering, or large textures, or 32b

textures?

There are two reasons: frame rate and image quality. Frame rate is the single most important feature that a gaming platform can provide, and not just average frame rate but sustained frame rate. How many times have you been wiped out in a death match when your frame rate suddenly drops as a number of characters and weapons enter the scene? 32bpp rendering with full 32bpp frame buffer accesses requires twice the memory bandwidth of 16bpp frame buffer accesses regardless of the graphics engine: Higher bandwidth requirement means lower frame rate. As for image quality, we have gone to great lengths to make games look great in 16bpp mode. We actually do the rendering calculations internally at 32 bits to have full precision with the 16-bit operands. Then, instead of simply truncating the results to 16 bits for saving in the frame buffer, we use a proprietary filtering algorithm that retains nearly the full precision of the color value. The result is something that rivals ANY full 32-bit rendering. Except it goes a lot faster. We think that is what gamers are looking for.

17. Does the Voodoo3 2000 and 3000 support the Linux operating system?

3dfx has provided a reference driver which is available at http://www.3dfxgamers.com/view.asp?PAGE=V3Drivers, but at this time the drivers are not supported directly by 3dfx Technical Support. It is recommended that you direct your questions to the 3dfx Linux newsgroups if you have any problems with these drivers.

18. Do the Voodoo3 2000 and 3000 support the Mac environment?

There are BETA drivers available for the Mac OS, which are available at http://www.3dfxgamers.com/view.asp/IOID=30 These drivers are not supported by 3dfx Technical Support and are primarily intended for use by programmers wishing to develop applications utilizing the Glide API on the Macintosh platform.

19. My TV and monitor are garbled simultaneously when using the TV Output feature.

One way to correct this is to open the TV application, go into the Video Standard tab, switch the standard setting to PAL, apply the change, set it back to NTSC and apply the setting. Also, keep in mind that the quality of the picture is determined by the age of the TV and the scan conversion of the TV's electronics.

20. If I put a fan on my Voodoo3, will I void my warranty?

No, if you think that your case is not receiving adequate ventilation, then feel free to add a small fan (a 486 CPU fan will work fine) to the top of the Voodoo3 heatsink. The key here is the original heatsink. Do NOT remove it. This will void your lifetime warranty.

21. When I start a Direct3D game, I get an error message that says: "No hardware acceleration found," or something similar.

Go to "Start" > "Run" and type in "DXDiag," then press enter. (This is if you have DX 6.1 or higher installed.) This will bring up the "DirectX Diagnostics Tool," click on the "display" tab, and verify that "DirectDraw" and "Direct3D" acceleration are enabled. If they are disabled, then enable them. If it says: "no acceleration is available" then close the DXDiag tool and go into your "system" properties. Click on "performance" then "graphics" and turn the "hardware acceleration" back to full, then reboot. You will now be able to enable the "Direct3D" acceleration in the DXDiag tool.

22. Error message: Error loading 3dfxcmn.dll.

Editing the registry can be tricky, if in doubt, call our tech support line: USA: 800-234-4334 UK: +44-0-753-212-612 Go to (in the Windows 95 or 98 registry):

HKeyLocalMachine\Software\Microsoft\Windows\CurrentVersion\Run You'll see the "3dfx tools" key on the right hand side, with the data contained within the key: rundll32.exe 3dfxcmn.dll,UpdateRegSettings Remove the comma "," and "UpdateRegSettings" so that the line only reads: rundll32.exe 3dfxcmn.dll Now reboot.

23.Error message: CoCreate Instance Failed.

Editing the registry can be tricky, if in doubt, call our tech support line: USA: 800-234-4334 UK: +44-0-753-212-612 This error occurs due to a registry conflict when installing the newer updated drivers over the previous ones. It has been determined that this conflict can occur because of previous registry entries from other video cards (especially a Diamond product). If there was a previous Diamond card in the system, Diamond technical support has a utility which will fix this issue. Otherwise please follow the directions below: The fix is to set the adapter to "Standard Display Adapter VGA," uninstall the "3dfx Tools," reboot, then edit the registry. Remove all traces of "Voodoo," "3dfx" and "Glide" from the registry. Reboot, then install the new drivers. If you would rather not edit the registry yourself, there is a new 3dfx Device Uninstaller utility available which will accomplish this procedure for you. Please contact 3dfx Technical Support for the utility.

24. What is the best way to install new drivers for my Voodoo3 card (or install it for the first time)?

PLEASE READ THIS SECTION COMPLETELY AND familiarize YOURSELF WITH IT BEFORE FOLLOWING THE STEPS. THESE ARE BASIC STEPS AND COULD DIFFER DEPENDING UPON WHICH VERSION OF WINDOWS YOU HAVE AND YOUR LEVEL OF EXPERTISE WORKING WITHIN WINDOWS ITSELF.

(a) First you will need to set the display adapter to "Standard Display Adapter VGA." (Follow the "a" steps.)

(b) If you are installing the Voodoo3 for the first time then you will want to do these steps BEFORE you put the Voodoo3 in the machine. (Follow the "b" steps.)

(a) and (b) To set the adapter to standard VGA, right click on the "my computer" icon and choose "properties" (or press the Windows hotkey and pause at the same time). This will take you into the "system properties." Click on the "device manager" tab, click on the plus sign in front of the "display adapter" category. Now double-click on the display adapter listed. Then choose the "driver" tab. Now choose "update" or "change" driver (depending upon which version of Windows you have). You will then want to choose the options "display a list of all drivers" and then "show all hardware" to bring up the Windows list of manufacturers. The "standard display types" are at the top of the list. The "Standard Display Adapter VGA" is the first one in this list. After choosing this adapter, if you have Windows 98 you will get a warning message. Disregard it and choose "yes." The Standard Display Adapter VGA will only give you 16 colors and a 640x480 resolution. You will now need to reboot to make the change take affect (Windows will prompt you to do this).

(a) If you are upgrading drivers, after rebooting, go into the "control panel" and "add/remove programs", and uninstall the 3dfx tools. Reboot again.

(a) You are now ready to install the new V3 drivers.

(b) If you are installing the Voodoo3 for the FIRST time, you should now have a 640x480 resolution and be in 16-color mode. Now go into the "control panel" and "add/remove programs" and uninstall any utilities which are for the video card you are replacing (examples would include "Diamond InControl Tools"). Reboot the computer again. **(see note below) If you are installing the drivers from the CD, run the installation by inserting the CD into the CD-ROM drive and follow the directions onscreen. When prompted to reboot go to the next step.

(b) Now shut Windows down, power the machine completely off, remove the power cord, and ground yourself by touching one of the screws inside your case. Remove the video card you are replacing and then insert the Voodoo3 card into the first PCI slot (or whichever one is available if you do not want to move cards around) or AGP slot. Connect the monitor and power cord and power the machine back on. After booting up, Windows should detect the new card, and the installation process from the CD should autorun and continue again. Install the 3dfx tools and reboot. If you have a previous version of DirectX (prior to DX6.1), you will need to install DirectX 6.1 from the Voodoo3 CD as well.

**If you are an advanced user and would rather install the newest drivers, do not run the installation from the CD before replacing the card. Simply replace the previous video card with the Voodoo3. Cancel when Windows detects the card upon boot up and double click on the Voodoo3 driver file you have downloaded to install the newest drivers and 3dfx tools.

25.I have an onboard video card and I'm having problems getting my Voodoo3 to take over as the primary video card.

If you have an onboard video card (one that is soldered to the board itself and can not be removed), there are several things you will need to do. Verify with the manufacturer of your computer that there is a BIOS setting or motherboard jumper setting that will disable your existing onboard video card. Sometimes, putting the new Voodoo3 into the first PCI slot will automatically disable the onboard video card too.

Before you put the Voodoo3 into your machine, you will need to make a few preparations. Here is the preferred method:

First, go into your "add/remove programs". Uninstall any drivers or utilities having to do with your onboard video card. Then reboot the machine.

Second, go into your "device manager" and change the "display adapter" listed to a "Standard Display Adapter VGA." Then reboot again.

After the machine has booted back into Windows, you should be in 16-color mode and at a 640x480 resolution.

Now power the machine completely off, remove the power cord, and ground yourself by touching one of the screws inside your case. Insert the Voodoo3 card into the first PCI slot (or whichever one is available if you do not want to move the cards around). Connect the monitor and power cord, and power the machine back on.

At this point if you get no video at all, you will need to contact the manufacturer of your computer to see if the Voodoo3 is compatible with your system. There are many computers (such as the Compaq Presario series) which need BIOS updates in order to function properly with the Voodoo3 installed.

After booting up, Windows should detect the new card and ask you for the drivers. Either install here from the CD or if you're an advanced user and would rather just install the newer drivers, cancel and double click on the driver file you have downloaded to install the drivers and 3dfx Tools.

After installing the drivers (and tools, if from the CD) then reboot and go into the "device manager" again. You should see both the Voodoo3 and the Standard Display Adapter VGA listed under the "display adapters" category. Double click on the "Standard Display Adapter VGA" and check the box that says, "disable in this hardware profile." Then reboot. After rebooting, check the Device Manager once again. There should now be a red X indicating that the Standard Display Adapter VGA is disabled.

Because there are many different versions of Windows available, these instructions could vary slightly. If you have any questions, call us at 800-234-4334, and we will guide you through this process.

26. Motherboard Updates and other information.

Make sure that you have the latest System BIOS, Motherboard Bus Mastering Drivers, and AGP Bus Drivers from your Motherboard Manufacturer.

IT IS VERY IMPORTANT THAT YOU VERIFY WITH YOUR MOTHERBOARD MANUFACTURER WHICH AGP AND BUS MASTERING DRIVERS YOU SHOULD USE. These links are provided as a courtesy only. If you download and install the wrong driver, it could cause Windows to not operate properly and/or no longer boot up.

If you have a VIA MVP3 AGP chipset, then you can download the most current AGP and bus mastering drivers at: http://www.viatech.com or http://www.via.com.tw and click on "drivers."

If you have an ALI Alladin V AGP chipset, go to: http://www.acerlabs.com/ and click on "drivers" or http://www.ali.com.tw/ and click on "support."

IMPORTANT: If you are given the option of choosing "Normal Mode" or "Turbo Mode" when installing these updated AGP drivers, you should normally choose "Normal Mode." Last but not least, contact your motherboard manufacturer and inquire if your board has a linear or switching AGP voltage regulator. If your board has a linear regulator, you may have problems with an AGP VooDoo3 card. For more info click here. retailers will carry the products (examples include CompUSA, Best Buy, Electronic Boutique, MicroCenter and Fry's).

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